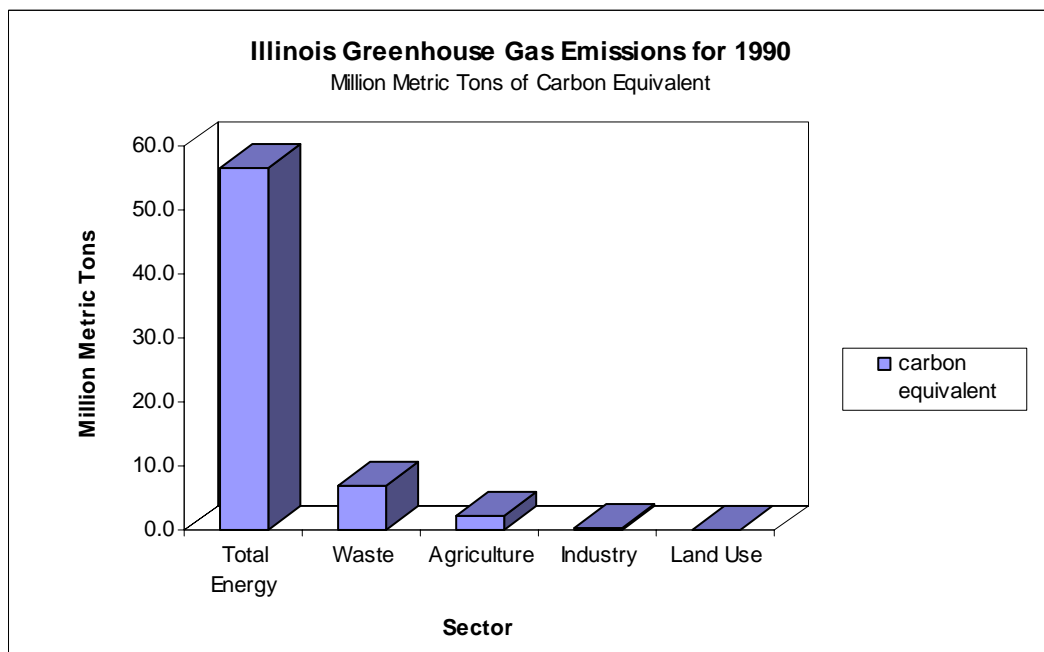


## ILLINOIS GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report *“Illinois Inventory of Greenhouse Gas Emissions and Sinks: 1990”* provides a detailed inventory of greenhouse gas emissions and sinks for Illinois in 1990. Emissions were estimated using methods from EPA’s 1992 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Illinois emitted 66.1 million metric tons of carbon equivalent (MMTCE). Illinois estimated emissions of 1.1 MMTCE from biomass fuels, and from other sources not covered in the workbook methodology. Emissions from these sources are not included in the reported total or the table below.<sup>1,2</sup>

The principal greenhouse gas was carbon dioxide, comprising almost 200 million metric tons (54.5 MMTCE). Other emissions included 1.8 million metric tons of methane (10.5 MMTCE), and 0.01 million metric tons of nitrous oxide (1.1 MMTCE).

<sup>1</sup> Note that the state of the art emission inventory method has advanced since Illinois completed its inventory; therefore, we excluded emission estimates for sources not covered by the most recent inventory guidance (<http://www.epa.gov/ttnchie1/eiip/techrep.htm#green>). These emissions include methane from natural gas injection/withdrawal and compressor engine exhaust, and from range cattle.

<sup>2</sup> In addition, the Illinois inventory estimated emissions of non-methane volatile organic compounds, carbon monoxide, and nitrogen oxides, which are greenhouse gases for which global warming potentials have not yet been developed.

### Illinois Greenhouse Gas Emissions for 1990

SECTOR	CO <sub>2</sub> (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	HFCs, PFCs, and SF6 (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	6.9	*	*	*	6.9
Energy - Commercial	3.4	*	*	*	3.4
Energy - Industrial	14.7	*	*	*	14.7
Energy - Transport	15.8	*	*	*	15.8
Energy - Utility	15.7	*	*	*	15.7
Energy - Exported Electricity	*	*	*	*	*
Energy - Other	-2.3	*	*	*	-2.3
<b>Total Energy</b>	<b>54.2</b>	<b>2.4</b>	<b>*</b>	<b>*</b>	<b>56.6</b>
<b>Waste</b>	<b>*</b>	<b>6.9</b>	<b>*</b>	<b>*</b>	<b>6.9</b>
<b>Agriculture</b>	<b>*</b>	<b>1.2</b>	<b>1.1</b>	<b>*</b>	<b>2.3</b>
<b>Industry</b>	<b>0.3</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>0.3</b>
<b>Land Use</b>	<b>.02</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>.02</b>
<b>TOTAL</b>	<b>54.5</b>	<b>10.5</b>	<b>1.09</b>	<b>*</b>	<b>66.1</b>

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk ( \* ) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the energy – other figures, and emissions from biofuel combustion are excluded.

The major source of carbon dioxide emissions was fossil fuel combustion (99%), the majority of which is due to transportation petroleum and utility coal. Illinois estimated emissions associated with land use, but did not estimate land use-related sinks (i.e., an increase in forest carbon storage), which in most states (and nationally) far exceed emissions. Sources of methane emissions were landfills (66%), coal mining and natural gas production (23%), manure management (7%), and domesticated animals (4%). Nitrous oxide emissions were attributable to fertilizer use.

Illinois's emissions in 1990 were 5.8 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.